Quiz #4

Name:

Do either problem; tell me which one to grade. Extra credit if you do both (but tell me which one to grade as the regular answer and which is extra, and I only grade the extra if the regular is correct).

1. Function ContainsDuplicates takes a single string as a parameter and returns true if there is any character that appears more than once in the string. It returns false if there are no such characters. For instance:

   ContainsDuplicates( "test" ) returns true
   ContainsDuplicates( "book" ) returns true
   ContainsDuplicates( "zazz" ) returns true
   ContainsDuplicates( "toad" ) returns false

Implement ContainsDuplicates.

2. Function CountChars takes two parameters: the source string and the target string, and returns the total number of times that any character in the target string appears in the source string. It is assumed that the target string is duplicate free. If it is not, return -1. Here are some examples:

   CountChars( "test", "t" ) returns 2
   CountChars( "thesis", "sh" ) returns 3 (2 s's and 1 h)
   CountChars( "thesis", "shs" ) returns -1

Implement the function CountChars. In implementing CountChars you may call ContainsDuplicates, defined in Question 1, and you may assume that ContainsDuplicates works as specified, regardless of what you wrote in your answer to Question 1.